

REMARKS

Each of the 12 claims of the application have been rejected under 35 U.S.C. 103(a) as being unpatentable over Miglioli (US 6,512,454).

Miglioli et al, in the tamper sensing circuit, uses a metal pad 219 which achieves an electrical connection to ground (external cover 215) through star washer 221. The screw 201 compresses metal pad 219 and washer 221 against the standoff 223, formed as an integral part of lower cover 215. The screw performs no electrical function other than compressively retaining the pad 219 and washer 221 against the surface of the standoff. The screw need not even be formed of an electrically conductive material to perform its function. Removal of the screw 201 does not by itself interrupt the circuit to ground, but only removes the assurance that an electrical contact is maintained. It is a distinct possibility that removal of the screw will not interrupt the circuit to ground potential since parts that have been clamped together over an extended period of time subsequent to manufacture are likely to remain in electrical contact until some positive action causes separation. The board 209 must move relative to the cover 215 to cause an electrical separation between washer 221 and either pad 219 or the standoff on cover 215.

In the structure of the present invention, the screw is a metal conductor that is electrically in series in the tamper circuit path to ground potential. As soon as the attachment screw is withdrawn far enough to interrupt the conductive path to ground, the tamper sensing circuit activates. Use of the screw as a series component assures circuit interruption upon withdrawal of the screw.

Although the difference between the reference and the present invention may not appear to be significant, the structure of the present invention provides an added degree of protection. If someone tampering with the device is capable of extracting data from a disassembled device, he would also be capable of defeating the tamper prevention circuit by mechanically manipulating the device. Any such individual would probably be skillful and technically competent, have knowledge of the security circuit and in all likelihood, would secure a device of the type to

examine for a determination as to how the device could be accessed to defeat the tamper sensing circuit and extract the data stored in the device

When a device secured against tampering as taught by Miglioli et al is encountered, the tamper sensing circuit could be defeated by drilling openings through the cover 215 and using screws to secure the device 209 to the cover 215. This would enable the screws 201 to be removed without interrupting the path to ground from circular pad 219 to the cover 215. This would enable access to the device 209 without activating the security circuits

Claim 1, as amended, defines the tamper sensing circuit as, "including a first conductive path with said electrically conductive connector element as a series component of said conductive path". This clearly distinguishes the present invention from the Miglioli et al reference where the conductive path to ground is from a metal pad 219, through star washer 221, to the grounded standoff 223 formed as a part of cover 215. Any connection to ground provided by the screw 201 is a secondary and parallel path and not a series connection that assures circuit interruption upon attachment screw withdrawal. Claims 2 through 5 continue the same definition and provide further detail recitation relating to the tamper sensing circuitry.

Method claim 6 also includes the maintenance of the, "output node at a first electrical potential by connecting said output node to said first electrical potential through a current path extending serially through said screw". Thus claims 6 and 7 incorporate the structure which enables an enhanced anti-tamper protection when compared to that enabled by the Miglioli et al reference.

Independent claim 8 and claims 9 through 12, which depend therefrom, recite that an output node is connected to a first electrical potential by a circuit, "extending in series through said conductive connector element" with the circuit interrupted by disengagement of the conductive connector. This is believed to create a structural distinction over the cited Miglioli et al reference which enables a superior tamper sensing protection.

The misspelling in claim 11 which was noted by the examiner has been corrected by this amendment.

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The prior art cited, but not applied has been reviewed, but is not believed to present any issues or art more pertinent than that included in the reference that the examiner has applied.

It is believed that the application, as now presented in amended form, is in condition for allowance. Reconsideration and allowance are solicited.

**CERTIFICATE OF MAILING
UNDER 37 C.F.R. 1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O.Box 1450, Mail Stop Amendment, Arlington, VA 22313-1450 on July 26, 2005.

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Respectfully submitted,

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